

2013 Black Bayou Reservoir (Bossier Parish) Vegetation Control Plan

LDWF, Inland Fisheries

Date Lake Formed - Impounded in 1975.

Waterbody Type – Reservoir created from the impoundment of Black Bayou

Parish – Bossier Parish, approximately 3 miles east of the town of Benton

Age and condition of control structure – approximately 36 years old, good condition.

Type of control structure – 150 foot long concrete spillway set at an elevation of 185 MSL.

Water level (MSL) – 185 MSL at normal pool stage. Normal seasonal water level fluctuations from approximately 183.5 MSL to 186.5 MSL

Surface area – 590 acres at normal pool stage, normal water level fluctuations do not greatly alter the surface acreage due to shoreline contour.

Average depth – 11.3 feet at normal pool stage

Watershed ratio – 28.2:1

Drawdown Potential of structure – lake can be completely dewatered. Exact dewatering in feet is unknown. Elevation will have to be shot for an accurate measurement.

Lake Commission –Cypress Black Bayou Recreation and Water Conservation District Commission

Creation / Nomination – The Cypress Black Bayou Recreation and Water Conservation District Commission created by state statute (Appendix I).

Members of the board of commissioners are appointed as follows: one by the Bossier Parish Police Jury, one by the mayor and governing authority of Bossier City, one by the mayor and governing authority of the village of Benton, one by the Bossier Parish School Board, and the fifth by the Board of Commissioners of the Bossier Levee District. Any vacancy in the office of commissioner, due to death, resignation or any other cause, shall be filled by the remaining commissioners for the unexpired term.

Cypress Black Bayou Recreation and Water Conservation District Commission			
Name	Appointed By:	Address	Term Expires
Wes Burdine	Bossier City	4503 Palmetto Rd, Benton, LA	7-31-2015
Mike Bankston	Town of Benton	5029 Sweetwater Dr., Benton, LA	7-31-2016
Ralph Whitley	Bossier Levee District	310 Cash Point Landing Bossier City, LA	7-31-2012
Robert Berry	Bossier Police Jury	121 Preston Bay Benton, LA	7-31-2013
Mike Weber	Bossier Parish School Board	313 Jacob's Point Benton, LA	7-31-2014

Mike Kling –Executive Director of the Cypress Black Bayou Recreation and Water Conservation District. 318-965-2289

Procedure for spillway openings – Cypress Black Bayou Recreation and Water Conservation District responsible for operation and maintenance of control structure, spillway and dam. Drawdown plans from lake commission are coordinated and approved through LDWF prior to opening the control structure.

Drawdown history of Black Bayou Reservoir from 1995 to 2010

Date Opened	Date Closed	Depth Below Pool	Purpose	Results	Issues
9/8/2009	1/15/2010 (planned closure)	6 – 8 Feet	Shoreline maintenance, repair and restoration of beach at park, erosion control	Drawdown unsuccessful due to heavy rains and flooding.	Drawdown cancelled due to heavy rains and flooding
8/15/2010	1/15/2011	6 – 8 Feet	Shoreline maintenance, erosion control, repair and restoration of beach, aquatic vegetation control.	Good, lake has not refilled as of 6/30/11 due to drought.	Concern over fish kills from early start date proposed by lake commission (8/1), date moved back to 8/15.

What significant stakeholders use the lake?

Black Bayou Reservoir is primarily used by lake residents, anglers, recreational boaters, water sports enthusiasts. Some commercial fishing is conducted.

What are their needs and concerns?

The primary concern of shoreline residents is access to the lake from their homes and camps, and aesthetics. Fishing access is generally a concern only in the upper end of the lake and the backs of coves.

What is the history of aquatic vegetation complaints?

There are occasional aquatic vegetation complaints in the upper end of the lake and the backs of some coves. Problem plants usually consist of typical shoreline vegetation types historically found in the lake, but due to extreme low water levels for an extended time, the shoreline is free and clear of any vegetation.

Have there been any controversial issues on the lake?

There are generally few controversial issues on the lake. Landowners complain about the drawing down of the lake for irrigation and farming practices, but that was the initial reason for building the reservoir.

Aquatic Vegetation Status:

Giant salvinia was documented in Black Bayou Reservoir in 2007. Two severe winters and the drawdown in 2010 reduced the plants to minimal levels in the lake. Giant salvinia was not found on the lake in 2011, but was found in a new development area of the lake during the summer of 2012. Herbicide applications have been and will be made in order to keep the plant from spreading to a problematic level. Less than 10 acres have accumulated on the lake as of 2-5-13.

Currently Black Bayou is at pool stage and undergoing residential development along shorelines of the lake. Due to this development, high profile awareness of salvinia has made for public outcry at a minimal amount seen on the lake. A public commission meeting was held and Evan Thames attended to answer questions and notify the public of LDWF efforts to control aquatic weeds on Black Bayou and Cypress as they are intertwined in the same area / system. At this time, giant salvinia is present on the lake but has not yet been a problem, nor has it been seen on Cypress at this time. Currently LDWF crews are scheduled to visit Black Bayou every two weeks to monitor and control giant salvinia.

Aquatic vegetation is restricted to a fringe in the reservoir, with the exception of the backs of coves and the upper end. Vegetation in the upper end consists of alligator weed, fragrant water lily, and water primrose. Total area was less than two acres as of 2-20-13.

During observations made in Feb of 2013, Inland Fisheries biologists determined that there were no significant aquatic vegetation problems on the lake. The presence of giant salvinia is a concern. Control efforts have been successful to date.

Limitations:

Shallow areas make herbicide applications difficult on the upper end of the lake.

Past Control Measures:

Foliar herbicide applications to emergent aquatic vegetation along the inhabited shoreline areas have provided some relief to shoreline property owners from access and aesthetic problems due to aquatic vegetation. Glyphosate was applied at label rates of 0.5 gallons per acre with 0.25 gallons per acre of non-ionic surfactant.

Giant salvinia coverage is routinely monitored in the reservoir. Herbicide applications are made as necessary. To control giant salvinia, diquat at a rate of 0.75 gallons per acre will be used in addition to 1.25 qt of surfactant mix being comprised of one part Thoroughbred and 4 parts Aqua King.

Recommendations:

Surveys to check for giant salvinia on Black Bayou Reservoir will be performed periodically and herbicide applications made by LDWF spray crews as necessary. Giant salvinia will be controlled with a mix of glyphosate (0.75 gal/acre) and diquat (0.25 gal/acre) with Aqua King Plus (0.25 gal/acre) and Thoroughbred (8 oz/acre) surfactants from April 1 to October 31. Outside of that time frame, diquat at a rate of 0.75 gallons per acre will be used in addition to 1 qt of surfactant mix being comprised of one part Thoroughbred and 3 parts Aqua King. Due to the shoreline of the lake being almost entirely developed, the remaining vegetation such as alligator weed and primrose will be controlled with Clearcast at a rate of 0.50 gal per acre in addition to 1 qt per acre of glyphosate and 1 qt per acre of nonionic surfactant. The added 1 qt per acre of glyphosate will produce a quicker brown-up of the vegetation than the normal 3 week results of straight Clearcast.

Typemap

Vegetation type map surveys have not been conducted on Black Bayou Reservoir to date. Type map sampling is scheduled for 2013.

Appendix I

RS 38:2601

PART III. CYPRESS-BLACK BAYOU RECREATION AND WATER CONSERVATION DISTRICT

§2601. Creation

The Cypress-Black Bayou Recreation and Water Conservation District is hereby created.

Added by Acts 1958, No. 292, §1.

RS 38:2603

§2603. District as political subdivision and body corporate; purpose and powers; issuing bonds and levying taxes

The Cypress-Black Bayou Recreation and Water Conservation District so created shall be a political subdivision of the State of Louisiana, shall constitute a waterworks district under the provisions of Article XIV, Section 14 of the Constitution of the State of Louisiana for the year 1921, as amended, and shall have all the rights, powers, privileges and immunities hereinafter set forth. Additionally, the district shall be a budgetary unit of the State of Louisiana and shall have for its purpose the development of the wealth and natural resources of the district by the conservation of water for agricultural, municipal, recreational, commercial, industrial and sanitary purposes. It shall constitute a body corporate in law with all the powers, rights, privileges and immunities of a public corporation, and all powers necessary for it to carry out the objects for which it was created. It shall have the power to sue and be sued and to buy and sell all types of property, both real and personal, and to expropriate in accordance with law any properties which may be necessary for the accomplishment of its purposes as herein contemplated. It shall have the authority to negotiate and execute contracts, to acquire by purchase, gift, expropriation or otherwise every type and specie of property and servitudes, rights of way and flowage rights necessary to its purpose, and to construct, build, purchase, lease, operate and maintain any facilities, works or machinery designed to accomplish the purposes of the district. It shall have complete control over the supply of fresh water made available by its facilities which shall be administered for the benefit of the persons residing or owning property within the District and if it should be for the benefit of the district it shall have the authority to sell such water for irrigation, municipal and industrial uses both within and outside the district. The district shall constitute an agency of the State of Louisiana designed to carry out an essential governmental function of the State, and all of the property of the district shall be exempt from taxation. It shall have the authority to cooperate and contract with the government of the United States or any department or agency thereof and to accept gifts, grants and donations of property and money therefrom. It shall have the authority to cooperate with the State of Louisiana or any political subdivision, department, agency or corporation of said state for the construction, operation and maintenance of such facilities designed to accomplish the purpose for which the district is created on any basis including the matching of funds and by participating in projects authorized by any federal or state law as it shall see fit.

The district shall have authority to incur debt, issue negotiable bonds and levy taxes for the purpose of constructing, acquiring, extending or improving any lands, reservoirs, levees, channels, canals, pipe lines, pumping stations, waterworks plants and any other facilities, including buildings, machinery and equipment, for the development of the wealth and natural resources of the district by the conservation and use of water for agricultural, municipal, recreational, commercial, industrial and sanitary purposes, including the acquisition of all lands incidental or necessary for the construction, use and enjoyment thereof, such purpose being hereby found and declared to be a public purpose. Any such bonds payable from ad valorem taxation shall be issued under the terms and provisions of Sub-Part A, Part III, Chapter 4, Title 39 of the Louisiana Revised Statutes of 1950, and any revenue bonds shall be issued under the terms and provisions of Sub-Part B or Sub-Part C of Part I, Chapter 10, Title 33 of the Louisiana Revised Statutes of 1950, provided, however, that any bonds so issued shall first be approved at a taxpayers election held in the manner prescribed by Part II, Chapter 4, Title 39 of the Louisiana Revised Statutes of 1950. In each instance the board of commissioners of the district shall be the governing authority of the district and shall have all of the rights, powers and privileges conferred upon the respective governing authorities by said statutes. Additionally, the district shall have authority to levy taxes under the provisions of Article X, Section 10 of the Constitution for the purpose of improving, operating and maintaining its facilities, provided any such tax shall first be approved at a taxpayers election as therein required. In the event any of the aforesaid parts of the Revised Statutes are in conflict with the provisions of this Part, then the provisions of this Part shall control, but in all other respects the cited portions of the Revised Statutes shall apply to the district for the purposes herein indicated.

Added by Acts 1958, No. 292, §3. Amended by Acts 1966, No. 198, §1.

RS 38:2607

§2607. Fishing activities; prohibition of certain gear

The Wildlife and Fisheries Commission may prohibit the recreational and commercial use of hoop nets, gill nets, trammel nets, strike nets, seines, wire nets, wire traps, and slat traps on Cypress Bayou Reservoir and Black Bayou Reservoir. In addition, the board of commissioners of the Cypress-Black Bayou Recreation and Water Conservation District shall maintain public access to Cypress Bayou Reservoir and to Black Bayou Reservoir.

Acts 2002, 1st Ex. Sess., No. 55, §1, eff. April 18, 2002.